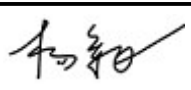




A **Volex** Company

SPECIFICATION IOT FOR
MODULE NO. : IPS035A105R
Rev No. : 0

GTK	PREPARED BY	CHECKED BY	APPROVED BY
SIGNATURE			
DATE	2022.05.19	2022.05.19	2022.05.19

CUSTOMER APPROVAL	SIGNATURE	DATE

Notes:

1. Please contact GTK before assigning your product based on this module specification.
2. To improve the quality of product, this product specification is subject to change without any notice.

[illegible]

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1. MODULE DESCRIPTION

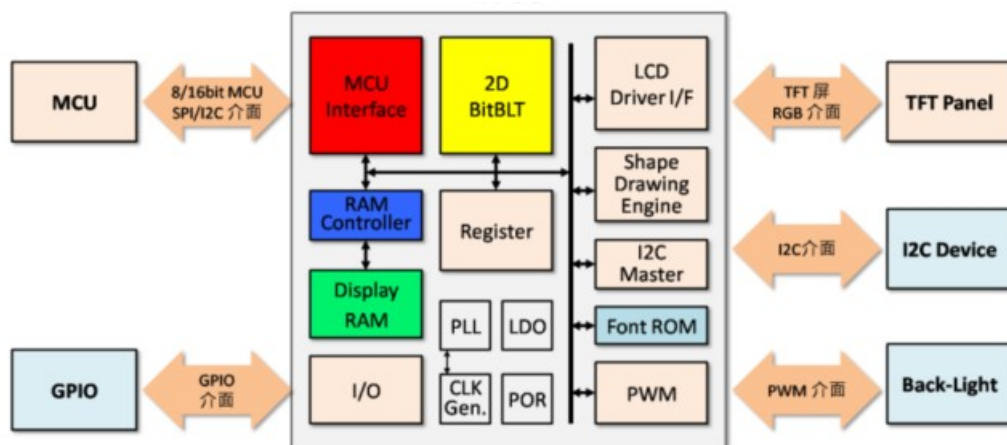
IPS035A105R is a 3.5" MCU screen. This product can be widely used in all kinds of smart home appliances, industrial control, electronic instruments, testing equipment, charging equipment and other fields of human-computer interaction occasions.



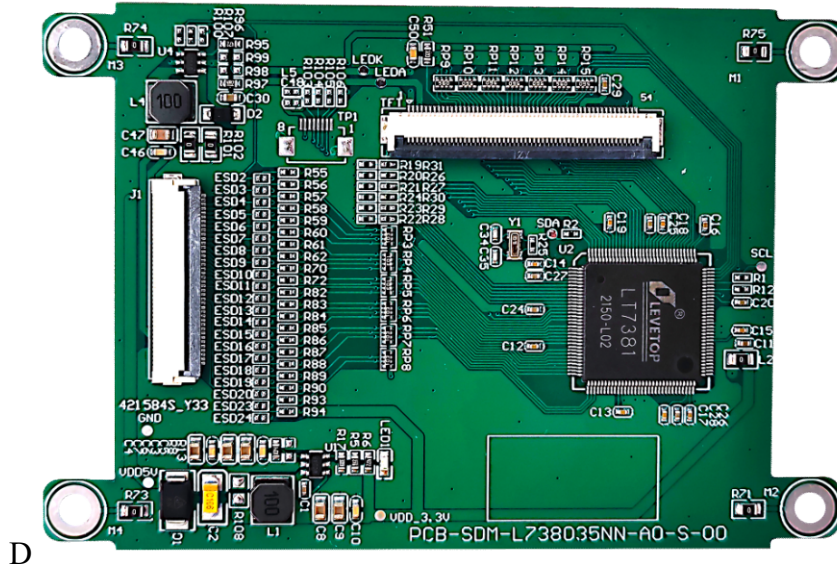
(1) HARDWARE PARAMETERS

Memory	32Mb Video Memory
Display Port	16-bit MCU
Power	5V DC (Typ.)
Power Consumption	TBD
Size	93.50*64.00*8.30mm
Language	Multiple languages supported
Weight	TBD

(2) FUNCTIONAL BLOCK DIAGRAM



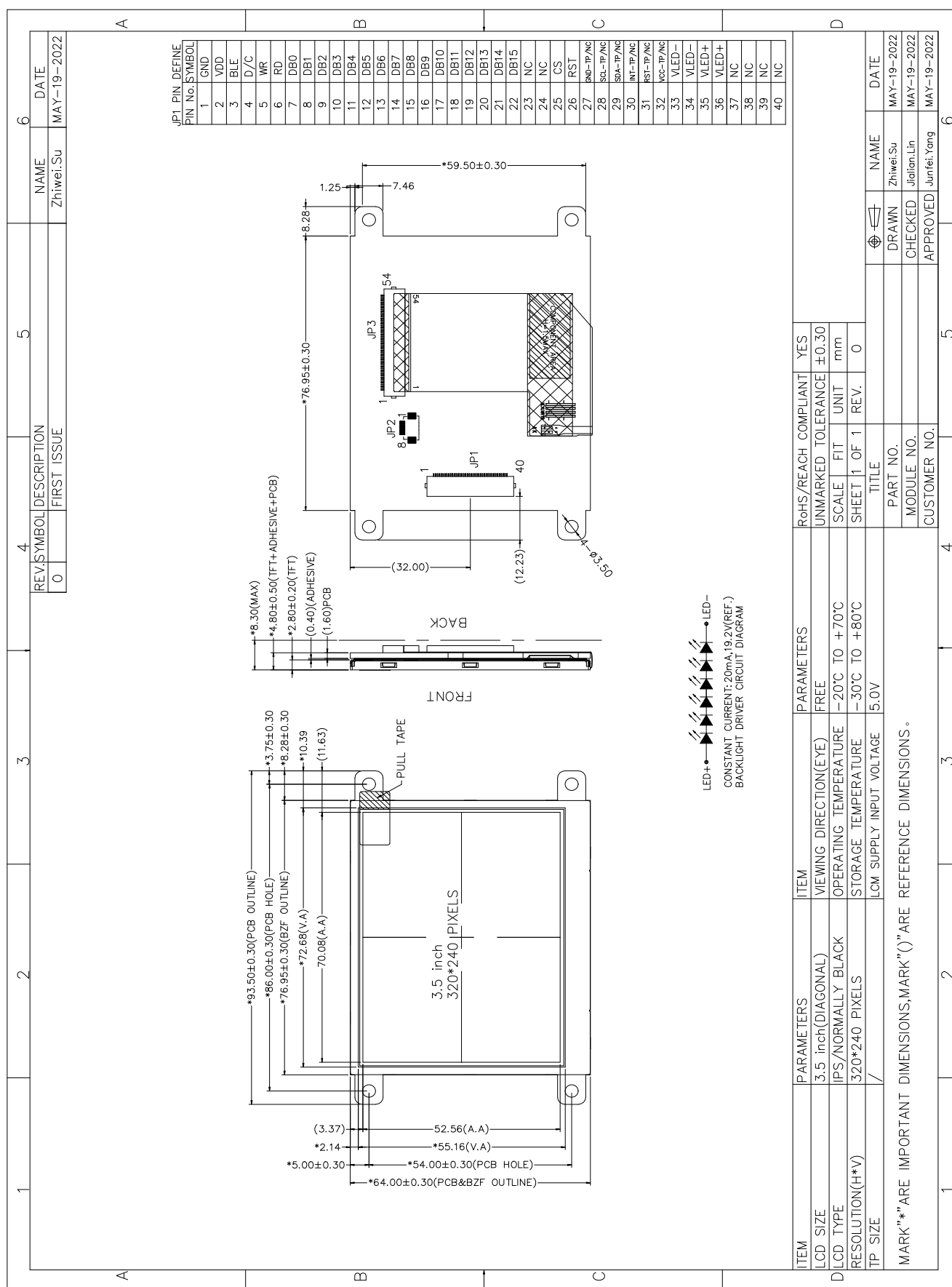
(3) INTERFACE DESCRIPTION



J1 : MUC Interface

No.	Symbol	Description
1	GND	Ground
2	VDD	Power
3	BLE	LCD backlight signal
4	RS/A0	Data or command pins (1: data read/write, 0: command read/write)
5	WR	Write the data control line to the LCD.
6	RD	Read the data control line from the LCD.
7-22	DB0-DB15	16 bit Bidirectional data bus
23-24	NC	No Connect
25	CS	Piece of optional signal
26	RST	Hardware resets the LCD signal
27	GND_TP/NC	TP Ground or No Connect
28	SCL_TP/NC	TP I ² C or No Connect
29	SDA_TP/NC	TP I ² C or No Connect
30	INT_TP/NC	TP Interrupt or No Connect
31	RST_TP/NC	TP RESET or No Connect
32	VCC_TP/NC	TP Power or No Connect
33	VLED-	Power for LED backlight
34	VLED-	Power for LED backlight
35	VLED+(5V)	Power for LED backlight
36	VLED+(5V)	Power for LED backlight
37-40	NC	No Connect

2.MOUDLE EXTERNAL DIMENSIONS



3.LCD DESCRIPTION

No.	Item	Contents	Unit
1	LCD Size	3.5	Inch
2	Display Mode	IPS/Normally Black ADS/Transmissive	/
3	Interface type	24 bit RGB	/
4	Resolution	320*240	Pixels
5	Pixel Pitch	0.219*0.219	mm
6	Color Depth	16.7	M
7	Module Size (L*W*H)	76.95*64.00*2.8mm	mm
8	Surface Luminance	500(Typ.)	cd/m ²

4.ABSOLUTE MAXIMUM RATINGS

Item	Symbol	Min.	Max.	Unit
Module Power Supply Input Voltage	VDD	5.0	5.5	V
Module Supply Current (Normal Temp.)	IVDD	-	TBD	mA
Operation Temperature	Top	-20	+70	°C
Storage Temperature	Tst	-30	+80	°C
Humidity	RH	-	90	%RH

5.RELIABILITY TEST CONDITIONS

No.	Test Item	Test condition		Inspection after test
1	High Temperature Storage Test	+80°C/72 hours		Inspection after 2~4 hours storage at room temperature, the sample shall be free from defects : 1.Current changing value before test and after test is 50% larger; 2. Function defect : Non-display,abnormal-d isplay 3.Visual defect : Glass crack.
2	Low Temperature Storage Test	-30°C/72 hours		
3	High Temperature Operating Test	+70°C/24 hours		
4	Low Temperature Operating Test	--20°C/24 hours		
5	Temperature Cycle Storage Test	--20°C ~ 25°C ~ +80°C/10 cycles (30 min.) (10 min.) (30 min.)		
6	High Temperature High Humidity Test	+60°C*90% RH/48 hours		
7	Vibration Test	Frequency : 250 r/min Amplitude : 1 inch Time: 45 min		
8	Drop Test	Drop direction: 1 corner/3 edges/6 sides ,10 times		
		Packing weight(kg)	Drop height(cm)	

		<11	80±1.6	
		11 ≤ G < 21	60±1.2	
		21 ≤ G < 31	50±1.0	
		31 ≤ G < 40	40±0.8	
9	ESD Test	Air discharge: ±8 KV, 10 times Contact discharge: ±4 KV, 10 times		

6.REMARK:

- Avoid any inappropriate external force or strong vibration in the assembly process.
- Do not twist or bend panels and prevent improper external forces from damaging panels during assembly.
- High temperature, high humidity or rapid temperature changes may affect performance. Store and use the product in an appropriate environment.
- Avoid dust, oil mist, acid, alkali and chloride damage to the product.
- Wear wrist straps, antistatic gloves and clothes during assembly to prevent electrostatic discharge (ESD).
- When assembling, use ionic fan to prevent electrostatic discharge (ESD).
- Removing the protective film from the top (PCBA binding side) to the bottom in 3 seconds to prevent electrostatic discharge (ESD).
- Follow the correct time sequence when operating.
- Avoid displaying the same mode/pattern for a long time.
- V-COM voltage should be adjusted after aging (blinking) to display the best performance.
- Turn off the power when connecting or disconnecting the circuit.
- Products may contain small amounts of liquid crystal and comply with local laws and regulations.